REMARKS

This communication is responsive to the final Office Action dated December 5, 2001. By this response, Applicant has amended claims 1, 21-22 and 27-29; deleted claim 18 without prejudice or disclaimer; and added new claims 32-42. Forty-one claims (3 independent and 38 dependent) remain pending in this Application. Support for the amendments is found in the Specification and claims originally filed. No new matter is added by this Amendment. **The Commissioner is authorized to charge any additional fees that may be required by this Amendment to Deposit Account No. 19-2814.**

Prior Art Rejections

The Office Action rejects prior claims 1-31 under Section 102(e), citing United States Patent No. 5,974,369 ("Radtke"). The Office Action rejects prior claims 22-31 under 35 U.S.C. § 103, citing Radtke in view of the Examiner's Official Notice. Applicant respectfully traverses the rejections, however, in that the Radke reference fails to expressly or impliedly disclose each and every element of the invention as described by the present claims, and in that it would not be obvious to modify the Radke reference to arrive at the claimed invention.

With reference to the Specification as originally filed, an exemplary embodiment of the present invention provides a system and a method of managing energy costs by optimizing energy consumption, purchasing, and/or generation decisions based at least in part upon energy usage and pricing data. The present invention is particularly useful in deregulated energy markets, wherein consumers have the opportunity to purchase power from multiple grid suppliers, as well as to obtain off-grid power through, for example, on-site generation, alternate fuels, demand-side management (DSM), and the like. Amended claim 1

now recites "*receiving pricing information from each of a plurality of sources of power*" and

"*determining an optimal consumption decision based on the received pricing data and the*

forecast load, wherein · the optimal consumption decision selects one of the plurality of

sources of power to thereby reduce utility costs ". Independent claims 22 and 35 contain

similar restrictions. At least these elements are not expressly or impliedly disclosed in the

Radtke reference, or in any other prior art reference of record.

The Radtke reference describes a "recording node" that monitors and stores energy

consumption information for subsequent retrieval over a network (*see, e.g.*, Radtke col. 1,

line 65 through col. 2, line 3). The recording node records consumption information and uses

this data to calculate real-time consumption rates (Figure 2A, element 132). The recording

node also calculates predicted consumption rate values based upon metering information

received during a predetermined period of time (col. 2, lines 38-43). Predicted cost

information is determined by multiplying the predicted consumption by a rate factor obtained

from a utility (col. 10, lines 37-42). As shown in Figure 4 of the Radtke reference (and as

discussed in col. 15, lines 32-47), the Radtke system is intended to allow consumers to shift

consumption (e.g. of a manufacturing process) during a particular period of time to avoid

over- or under-consumption of fixed-rate energy. Stated another way, the Radtke recording

node is a monitoring device that provides consumption information for only a relatively short

interval of time (see, e.g., col. 8 lines 25-38). Radtke is not concerned with managing energy

costs using both consumption data and pricing data from multiple energy sources, as

described by the present claims.

The Radtke reference does describe several applications of the recording device; each

of these implementations, however, is distinguishable from the present invention and/or fails

to disclose each and every element of the presently-claimed invention. Although the Office

Action has concluded that various elements of the prior claims are "inherent" from Radtke's

teachings, Applicant respectfully disagrees. The Office Action states, for example, that

Radtke's teaching of "a projected/predicted end-of-interval consumption value" inherently

teaches that the optimal consumption decision would be obtained from utilizing this

information. Applicant respectfully disagrees with this assertion, since it would be far more

complicated to generate an optimized result considering multiple factors than to merely

predict a future value from historical data. Indeed, the Radke reference teaches away from

an optimizing algorithm when it states:

> Step 136 then calculates a prejected/predicted end-of-interval
> consumption value for the respective meter based on the
> consumption that has occurred so far during the interval, *and
> the assumption that the rate of consumption will stay at the
> current calculated pseudo real-time rate for the remainder of
> the interval.* (col. 8, lines 33-38, emphasis added).

Clearly, if the rate of consumption is assumed to be invariant for the remainder of the

interval, the described system must not intend to change the present rate of consumption by

optimizing the rate or by seeking energy from an alternate source. Accordingly, the cited

passage does not anticipate the present invention.

Similarly, the final Office Action states without elaboration that the elements recited

in prior claims 7, 9, 10, 11, 13, 14, 15-16, and 17 are "inherently included" in Radtke, col. 12,

lines 59-67, which is reproduced in its entirety as follows:

> Existing process computer 200 for operating process 196 can
> receive or send data via a gateway 202 onto network 184.
> Thus the existing process computer can be apprised of changes
> in the price of energy, weather forecasts and other information
> needed in deciding how to operate the operating process.
> Further, in an optional embodiment, a user of personal

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> computer 204 can enter network 184 via gateway 206 to
> receive data of interest from any of the nodes, such as from
> recording node.

The Office Action states that this language "inherently includes" the elements of grid price point data, distributed generation price point data, demand-side management price point data, alternative fuel price point data, price baselines as a function of forecast load, optimal cost curves, optimization algorithms, and other elements of the prior claims. Applicant respectfully contends, however, that to construe the "other information" mentioned in the Radtke as disclosing each and every element of Applicant's claims without further citation is only possible through liberal use of impermissible hindsight. As stated above, Radtke makes no express or implied mention of gathering pricing data from multiple sources or of generating a consumption plan that selects between the multiple energy sources to reduce energy costs, and therefore does not anticipate the present claims.

Each of the dependent claims inherit the limitations of the parent independent claims and are therefore believed to be patentable *a fortiori*. Nevertheless, Applicant reserves the right to present arguments as to the patentability of any aspect of the dependent claims at a later date.

In sum, Applicant respectfully submits that the present application is in condition for allowance, and earnestly solicits a Notice of Allowance at the Examiner's earliest convenience. The Examiner is invited to telephone the undersigned if such would advance prosecution of this Application in any way.

Dated this 5th day of April _____, 2002.

Respectfully submitted on behalf of
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